

Claims

- [c1] 1. A solder composition, comprising:
chromium (Cr) in an amount of 5~20 wt.%;
a component selected from a group consisting of tin (Sn), zinc (Zn), bismuth (Bi), indium (In) and a mixture thereof; and
an impurity.
- [c2] 2. The solder composition according to claim 1, further comprising another component selected from a IVB group in the periodic table or a mixture thereof in an amount of 0.01~10 wt.%.
- [c3] 3. The solder composition according to claim 1, further comprising another component selected from a VB group in the periodic table or a mixture thereof in an amount of 0.01~10 wt.%.
- [c4] 4. The solder composition according to claim 1, further comprising another component selected from a IIIB group in the periodic table or a mixture thereof in an amount of 0.01~20 wt.%.
- [c5] 5. The solder composition according to claim 4, wherein the component selected from the IIIB group in the peri-

odic table or a mixture thereof at least comprises cerium (Ce), samarium (Sm), neodymium (Nd), lutetium (Lu) or a mixture thereof.

[c6] 6. The solder composition according to claim 1, further comprising another component selected from silver (Ag), copper (Cu) or a mixture thereof having an amount of 0.01~10 wt.%.

[c7] 7. The solder composition according to claim 1, further comprising stibium (Sb) in an amount of 0.01~50 wt.%.

[c8] 8. The solder composition according to claim 1, further comprising another component selected from nickel (Ni), cobalt (Co), manganese (Mn) or a mixture thereof in an amount of 0.01~5 wt.%.

[c9] 9. The solder composition according to claim 1, further comprising gallium (Ga) in an amount of 0.01~10 wt.%.

[c10] 10. A solder composition, comprising:
chromium (Cr) in an amount of 0.01~5 wt.%;
a component selected from a group consisting of tin (Sn), zinc (Zn), bismuth (Bi), indium (In) and a mixture thereof; and
an impurity.

[c11] 11. The solder composition according to claim 10, fur-

ther comprising another component selected from silver (Ag), copper (Cu) or a mixture thereof having an amount of 0.01~10 wt.%.

[c12] 12. The solder composition according to claim 10, further comprising stibium (Sb) in an amount of 0.01~50 wt.%.

[c13] 13. The solder composition according to claim 10, further comprising another component selected from nickel (Ni), cobalt (Co), manganese (Mn) or a mixture thereof in an amount of 0.01~5 wt.%.

[c14] 14. The solder composition according to claim 10, further comprising gallium (Ga) in an amount of 0.01~10 wt.%.